IN THE CLAIMS

The status of each claim of the present application is listed below.

1. (Currently Amended): A process for manufacturing a steel strip with low aluminum content, comprising: hot-rolling a steel strip comprising between 0.050 and 0.080% by weight of carbon, between 0.25 and 0.40% by weight of manganese, less than 0.020% by weight of aluminum, and between 0.010 and 0.014% by weight of nitrogen, the remainder being iron and inevitable trace impurities, to form a strip;

subjecting said strip to a first cold-rolling, to produce a cold-rolled strip;

annealing said cold-rolled strip, to form an annealed cold-rolled strip;

~~optionally,~~ subjecting said annealed cold-rolled strip to a secondary cold-rolling;

wherein said annealing is a continuous annealing comprising:

raising the temperature of the strip to a temperature higher than the temperature of onset of pearlitic transformation Ac_1,

holding the strip above this temperature for a duration of longer than10 seconds,

rapidly cooling the strip to a temperature below 100°C at a cooling rate in excess of 100°C per second,

thermally treating the strip at a low temperature ranging between 100°C and 300°C for a duration in excess of 10 seconds, and

cooling the strip to room temperature.

2. (Previously Presented): The process according to claim 1, wherein after said rapidly cooling and prior to said thermally treating, a plastic deformation operation is

performed comprising an elongation of the strip with a percentage elongation ranging between 1 and 5%.

3. (Previously Presented): The process according to claim 1, wherein the strip is maintained during said annealing at a temperature between said Ac, and 800°C for a duration ranging from 10 seconds to 2 minutes.

4. (Previously Presented): The process according to claim 1, wherein said rapidly cooling is carried out at a rate between 100°C and 500°C per second.

5. (Previously Presented): The process according to claim 1, wherein said thermal treatment comprises maintaining the strip at low temperature ranging between 100°C and 300°C for a duration ranging between 10 seconds and 2 minutes.

6. (Previously Presented): The process according to claim 2, wherein said plastic deformation operation by elongation of the strip comprises planishing under traction.

7. (Previously Presented): The process according to claim 2, wherein said plastic deformation operation by elongation of the strip comprises rolling.

8. (Previously Presented): The process according to claim 1, further comprising manufacturing a container with said steel strip.

9. (Currently Amended) A steel strip, produced by a process comprising:

hot-rolling a steel strip comprising between 0.050 and 0.080% by weight of carbon, between 0.25 and 0.40% by weight of manganese, less than 0.020% by weight of aluminum, and between 0.008 and 0.016% by weight of nitrogen, the remainder being iron and inevitable trace impurities, to form a strip;

subjecting said strip to a first cold-rolling;

annealing said cold-rolled strip;

~~optionally,~~ subjecting said annealed strip to a second cold-rolling;

wherein said annealing is a continuous annealing comprising:

raising the temperature of the strip to a temperature higher than the temperature of onset of pearlitic transformation Ac_1,

holding the strip above this temperature for a duration of longer than 10 seconds,

rapidly cooling the strip to a temperature below 100°C at a cooling rate $\geq$ 100°C per second,

thermally treating the strip at a low temperature ranging between 100°C and 300°C for a duration in excess of 10 seconds, and

cooling the strip to room temperature.

10. (Previously Presented) A steel sheet with low aluminum content, comprising:

between 0.050 and 0.080% by weight of carbon,

between 0.25 and 0.40% by weight of manganese,

less than 0.020% by weight of aluminum, and

between 0.008 and 0.016% by weight of nitrogen, the remainder being iron and inevitable trace impurities, wherein

when in an aged condition said sheet comprises a percentage elongation A% satisfying the relationship:

$$(750 - Rm)/16.5 \leq A\% \leq (850 - Rm)/17.5$$

where Rm is the maximum rupture strength of the steel, expressed in MPa.

11. (Previously Presented) The steel sheet according to claim 10, wherein said steel sheet comprises further:

COTTRELL atmospheres and/or epsilon carbides.

12. (Previously Presented) A container, comprising the steel sheet according to claim 10.

13. (Previously Presented) The steel sheet according to Claim 10, wherein said steel sheet further comprises:

a grain count per mm^2 greater than 30,000.

14. (Previously Presented) The steel sheet according to Claim 10, comprising:

between 0.055 and 0.075% by weight carbon,

between 0.27 and 0.37% by weight manganese,

less than 0.015% by weight aluminum, and

between 0.009 and 0.014% by weight nitrogen.

15. (Previously Presented) The steel sheet according to Claim 10, comprising:

between 0.060 and 0.070% by weight carbon,

between 0.30 and 0.35% by weight manganese,

less than 0.010% by weight aluminum, and

between 0.010 and 0.012% by weight nitrogen.

16. (Previously Presented) The steel sheet according to Claim 10, comprising:

between 0.010 and 0.014% nitrogen.

17. (Previously Presented) The steel sheet according to Claim 10, wherein said steel sheet further comprises:

a gram count per mm^2 greater than 40,000.

18. (Previously Presented) The steel sheet according to Claim 9, wherein after said rapidly cooling and prior to said thermally treating, a plastic deformation operation is performed comprising an elongation of the strip with a percentage elongation ranging between 1 and 5%.

SUPPORT FOR THE AMENDMENTS

Substitute drawings are submitted herewith, and include the text in English.

Claims 1 and 9 have been amended to positively recite the secondary cold-rolling.

No new matter is believed to have been added to the present application by the amendments submitted above.